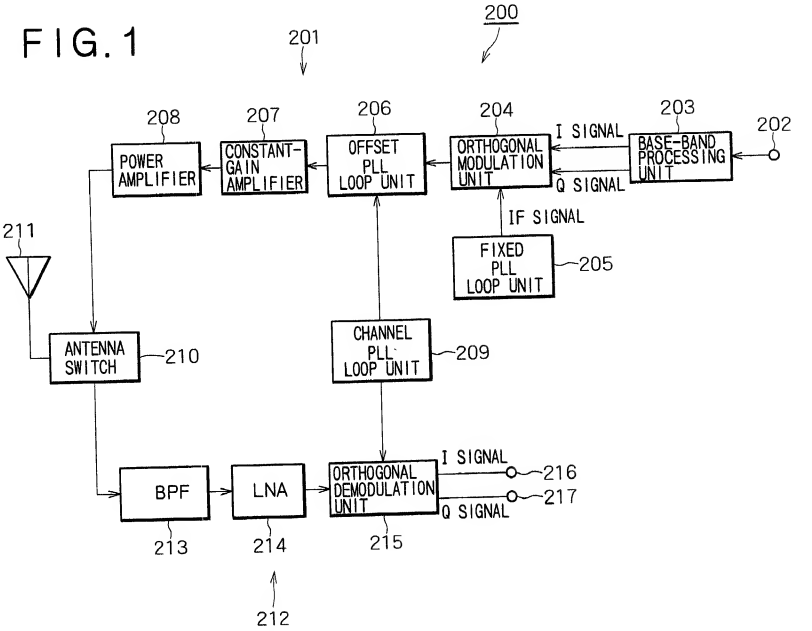
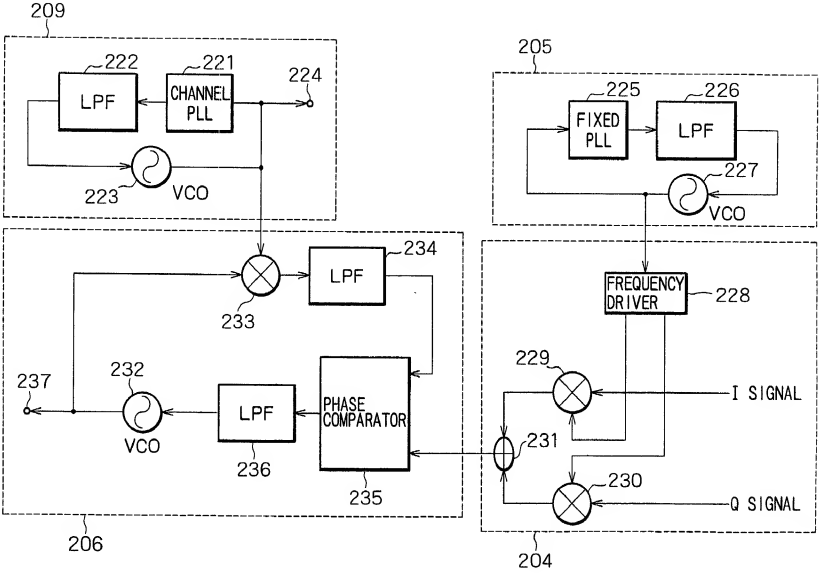
T02120 "Tech0660

FIG. 1



TOCTZO" TZETHOOGO

FIG. 2



TOSTAR TECH0660

FIG. 3

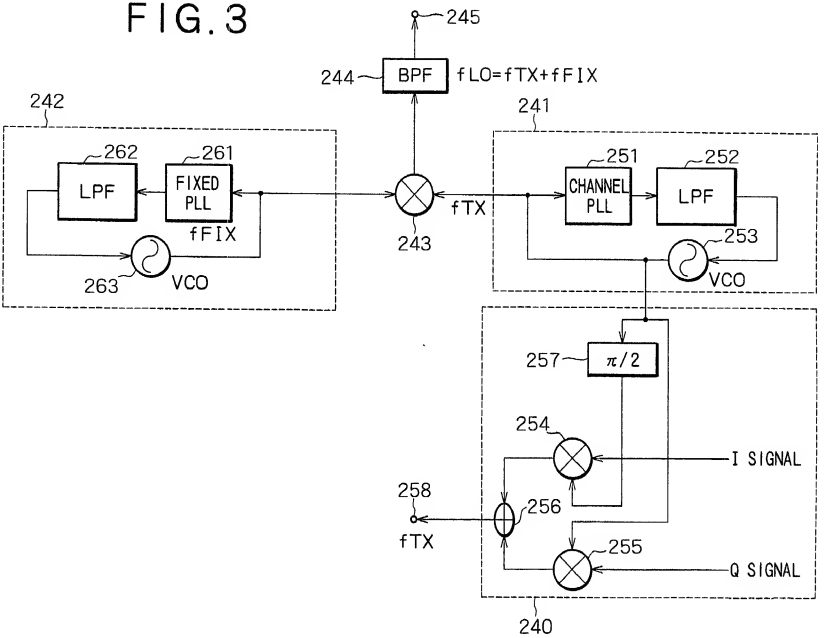


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FIG. 4

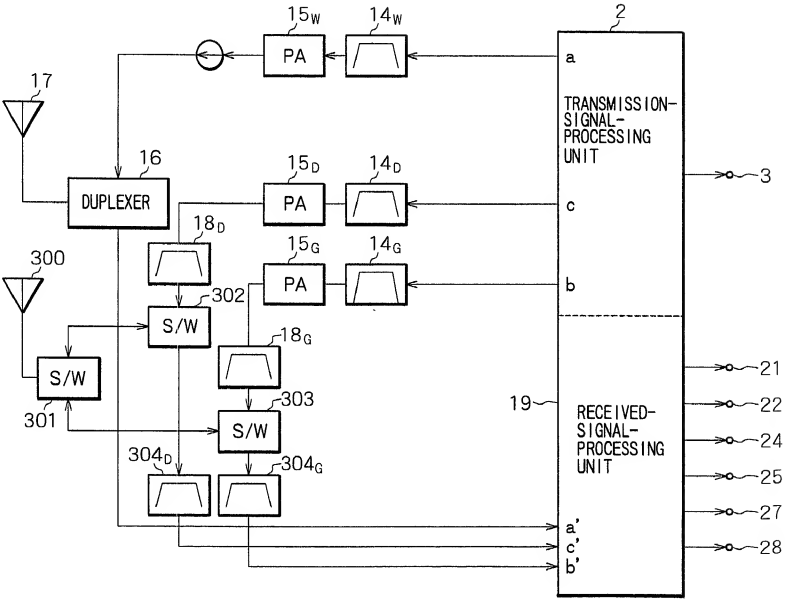

FIG. 5

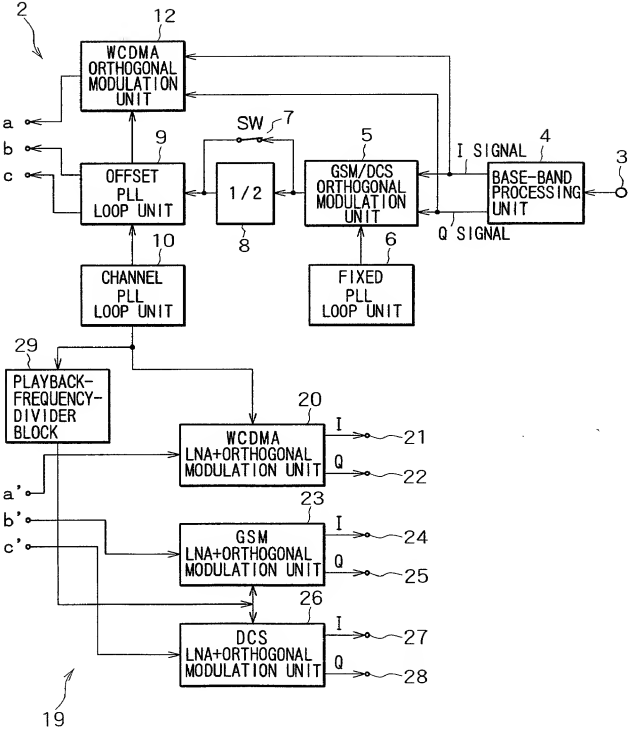
2
12
WCDMA ORTHOGONAL MODULATION UNIT
a
b
c
SW
7
9
OFFSET PLL LOOP UNIT
1/2
8
5
GSM/DCS ORTHOGONAL MODULATION UNIT
I SIGNAL
4
BASE-BAND PROCESSING UNIT
3
Q SIGNAL
10
CHANNEL PLL LOOP UNIT
6
FIXED PLL LOOP UNIT
29
PLAYBACK-FREQUENCY-DIVIDER BLOCK
20
WCDMA LNA+ORTHOGONAL MODULATION UNIT
I
Q
21
22
a'
b'
c'
23
GSM LNA+ORTHOGONAL MODULATION UNIT
I
Q
24
25
26
DCS LNA+ORTHOGONAL MODULATION UNIT
I
Q
27
28
19

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FIG. 6

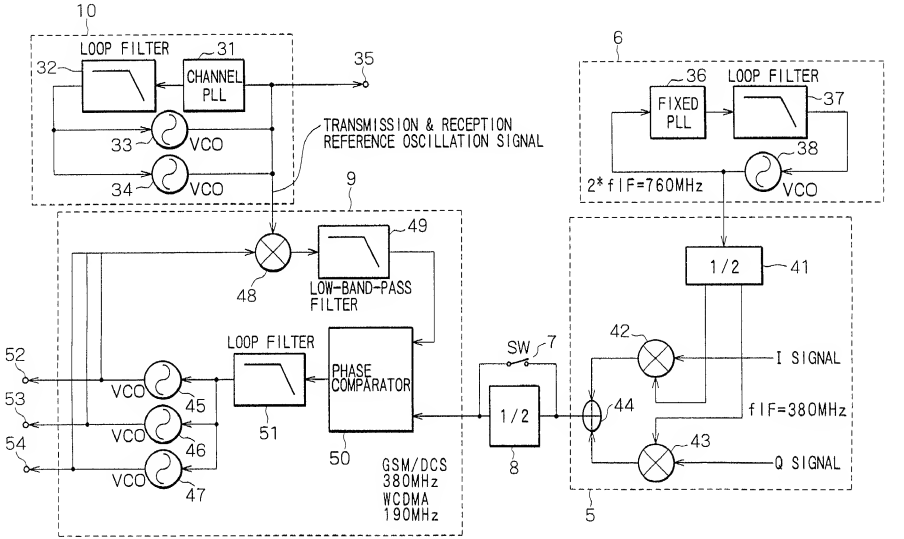

FIG. 7A

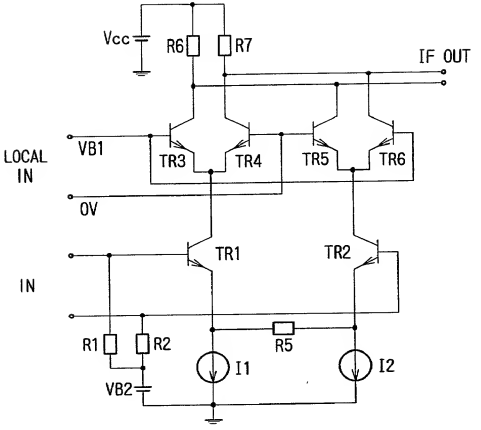
Vcc
R6
R7
IF OUT
LOCAL IN
VB1
TR3
TR4
TR5
TR6
0V
TR1
TR2
IN
R1
R2
R5
I1
I2
VB2

FIG. 7B

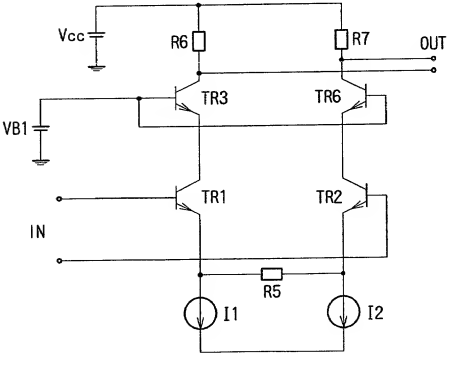
Vcc
R6
R7
OUT
TR3
TR6
VB1
TR1
TR2
IN
R5
I1
I2

FIG.8

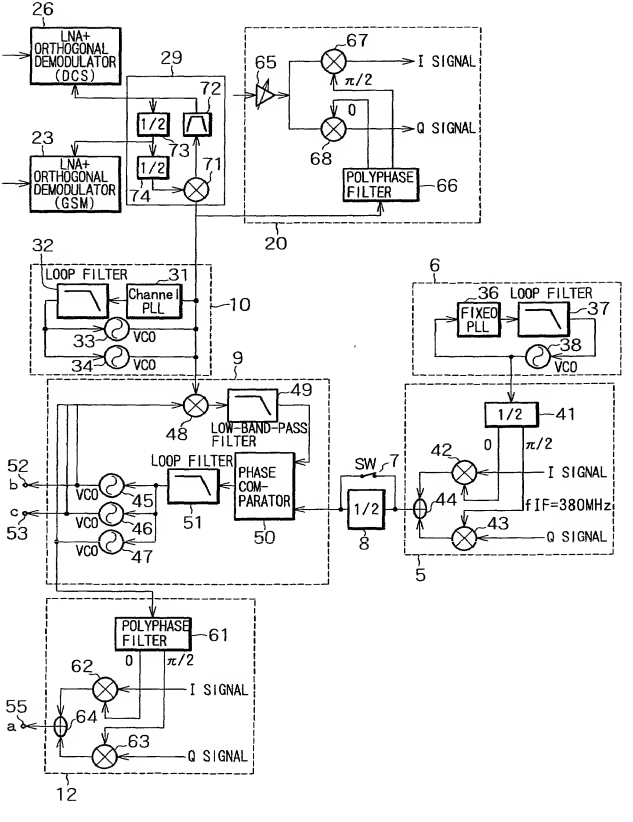
26
LNA+ ORTHOGONAL DEMODULATOR (DCS)
29
72
1/2
73
23
LNA+ ORTHOGONAL DEMODULATOR (GSM)
1/2
74
71
65
67
I SIGNAL
π/2
0
Q SIGNAL
68
POLYPHASE FILTER
66
20
32
LOOP FILTER
31
Channel PLL
10
33
VCO
34
VCO
6
36
LOOP FILTER
FIXED PLL
37
38
VCO
9
49
48
LOW-BAND-PASS FILTER
52
b
c
53
LOOP FILTER
PHASE COM-PARATOR
VCO
45
VCO
46
VCO
47
51
50
SW
7
1/2
8
1/2
41
42
0
π/2
I SIGNAL
44
fIF=380MHz
43
Q SIGNAL
5
POLYPHASE FILTER
61
62
0
π/2
I SIGNAL
55
a
64
63
Q SIGNAL
12

FIG.9

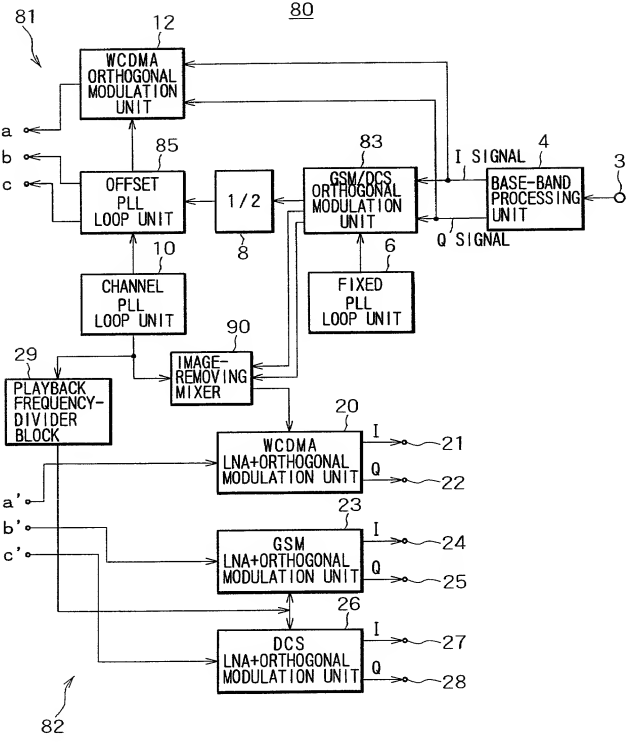
80
81
12
WCDMA ORTHOGONAL MODULATION UNIT
a
b
c
85
OFFSET PLL LOOP UNIT
1/2
8
83
GSM/DCS ORTHOGONAL MODULATION UNIT
I SIGNAL
Q SIGNAL
4
BASE-BAND PROCESSING UNIT
3
10
CHANNEL PLL LOOP UNIT
6
FIXED PLL LOOP UNIT
90
IMAGE-REMOVING MIXER
29
PLAYBACK FREQUENCY-DIVIDER BLOCK
20
WCDMA LNA+ORTHOGONAL MODULATION UNIT
I
Q
21
22
a'
b'
c'
23
GSM LNA+ORTHOGONAL MODULATION UNIT
24
25
26
DCS LNA+ORTHOGONAL MODULATION UNIT
27
28
82

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FIG.10

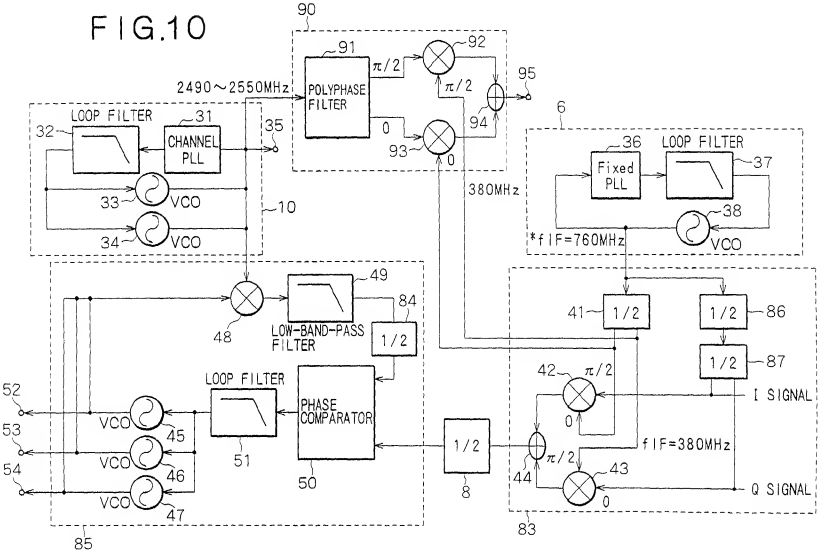

FIG. 11

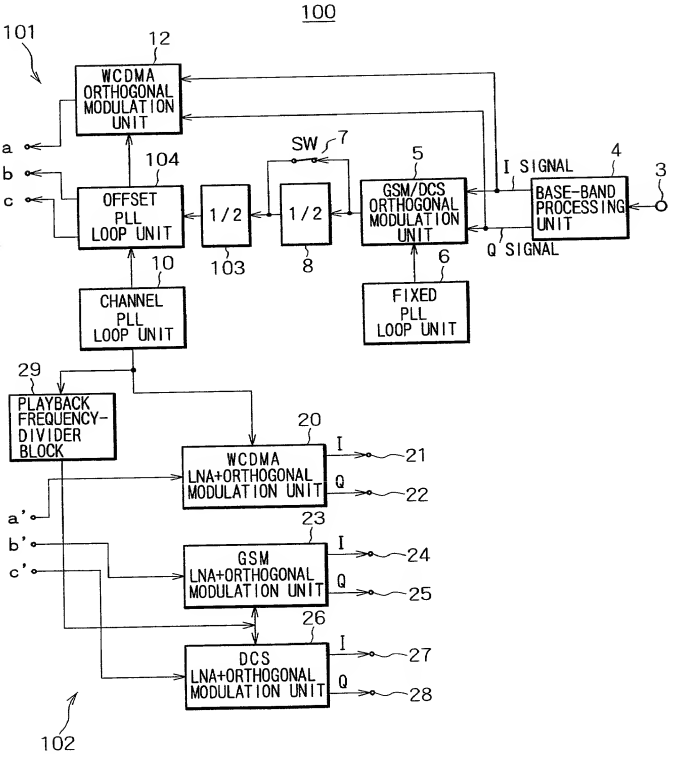
100
101
12
WCDMA ORTHOGONAL MODULATION UNIT
a
b
c
104
OFFSET PLL LOOP UNIT
1/2
103
SW
7
1/2
8
5
GSM/DCS ORTHOGONAL MODULATION UNIT
I SIGNAL
Q SIGNAL
4
BASE-BAND PROCESSING UNIT
3
10
CHANNEL PLL LOOP UNIT
6
FIXED PLL LOOP UNIT
29
PLAYBACK FREQUENCY-DIVIDER BLOCK
20
WCDMA LNA+ORTHOGONAL MODULATION UNIT
I
Q
21
22
a'
b'
c'
23
GSM LNA+ORTHOGONAL MODULATION UNIT
I
Q
24
25
26
DCS LNA+ORTHOGONAL MODULATION UNIT
I
Q
27
28
102

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FIG. 12

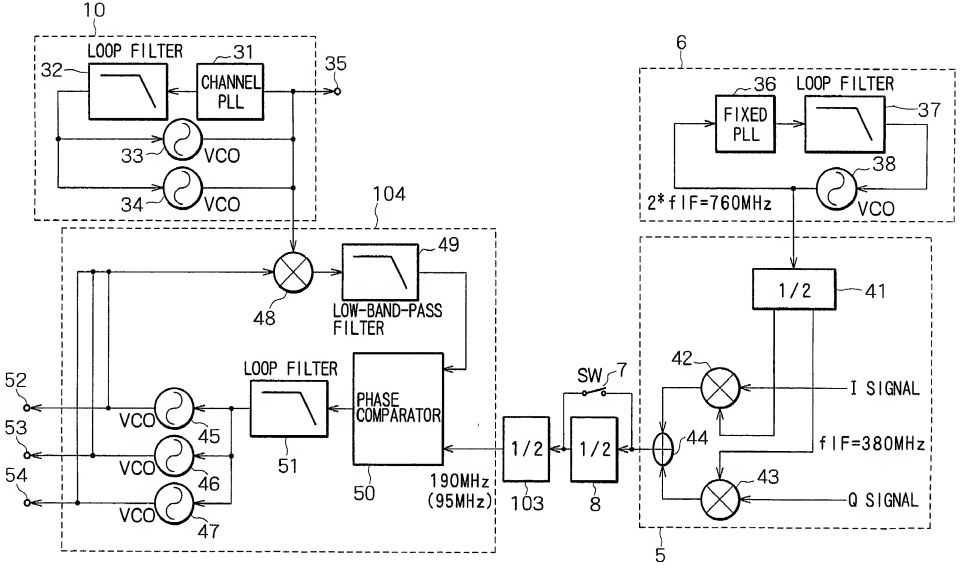
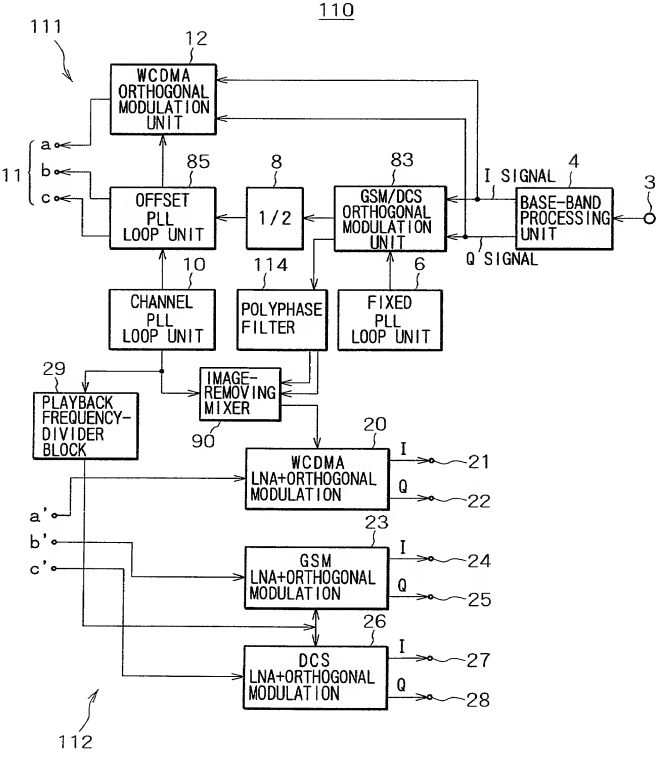


FIG. 13


110
111
12
WCDMA ORTHOGONAL MODULATION UNIT
a
b
c
11
85
OFFSET PLL LOOP UNIT
8
1/2
83
GSM/DCS ORTHOGONAL MODULATION UNIT
I SIGNAL
4
BASE-BAND PROCESSING UNIT
3
Q SIGNAL
10
CHANNEL PLL LOOP UNIT
114
POLYPHASE FILTER
6
FIXED PLL LOOP UNIT
29
PLAYBACK FREQUENCY-DIVIDER BLOCK
IMAGE-REMOVING MIXER
90
20
WCDMA LNA+ORTHOGONAL MODULATION
I
Q
21
22
a'
b'
c'
23
GSM LNA+ORTHOGONAL MODULATION
I
Q
24
25
26
DCS LNA+ORTHOGONAL MODULATION
I
Q
27
28
112

T02P20 T2EH0860

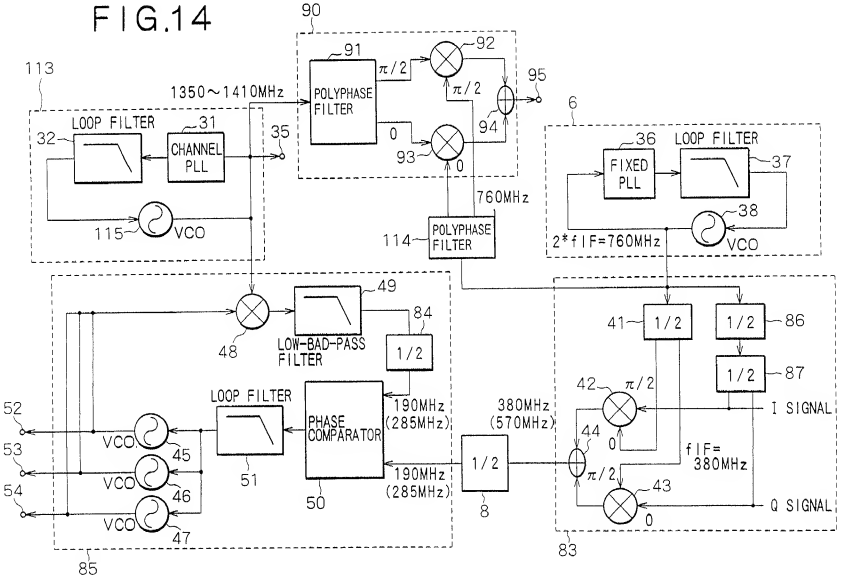



FIG.14